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(54) Light emitting device

(57) A light emitting device [10, 15, 50, 130] is constructed on a substrate [2, 132]. The device includes an n-type semiconductor layer [3] in contact with the substrate [2, 132], an active layer [4] for generating light, the active layer [4] being in electrical contact with the n-type semiconductor layer [3]. A p-type semiconductor layer [5] is in electrical contact with the active layer [4], and a p-electrode [21, 51, 101] is in electrical contact with the p-type semiconductor layer [5]. The p-electrode [21, 51, 101] includes a layer of silver in contact with the p-type semiconductor layer [5]. In the preferred embodiment of the present invention, the n-type semiconductor layer

[3] and the p-type semiconductor layer [5] are constructed from group III nitride semiconductor materials. In one embodiment of the invention the silver layer is sufficiently thin to be transparent. In other embodiments, the silver layer is thick enough to reflect most of the light incident thereon. A fixation layer [52, 102] is preferably provided over the silver layer. The fixation layer [52, 102] may be a dielectric or a conductor, the choice depending on whether or not the silver layer is transparent.

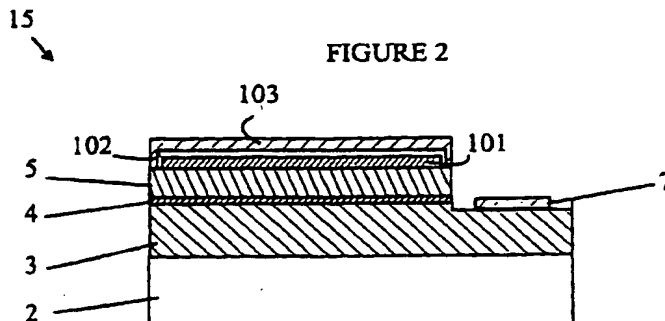


FIGURE 2

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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 31 0251

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The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>6 April 2000</b>	Examiner <b>De Laere, A</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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# EUROPEAN SEARCH REPORT

Application Number  
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CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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